

ABSTRACT

In order to provide an electronic timepiece having high transfer efficiency and a compact and thin structure, there
5 are provided a plate-like piezoelectric actuator 341, a driven body 343 driven with a vibration of the piezoelectric actuator 341, and a time-indicating mechanism 5 operating with a drive of the driven body 343 via a transfer mechanism 4.

FIG. 1

- 1: POWER SOURCE
- 4: TRANSFER MECHANISM (SPEED-REDUCTION TRAIN WHEEL)
- 5: TIME-INDICATING MECHANISM (SECOND, MINUTE, HOUR HANDS)
- 8: TIME CORRECTOR (CROWN)
- 100: POSITION DETECTOR
- 201: OSCILLATION CIRCUIT
- 202: FREQUENCY DIVIDER
- 225: CONTROL CIRCUIT
- 341: PIEZOELECTRIC ACTUATOR
- 343: ROTOR
- 2361: OSCILLATION CIRCUIT
- 2362: WAVEFORM-SHAPING CIRCUIT
- 2363: MOTOR-DRIVE CIRCUIT

FIG. 5

- 2363: DRIVE CIRCUIT

FIG. 6

LONGITUDINAL VIBRATION

FIG. 14

FREQUENCY

IMPEDANCE CHARACTERISTIC